



# ENERGY STAR® Application for Certification

# 88

ENERGY STAR®  
Score<sup>1</sup>

## BC Cadigan Offices

**Registry Name:** BC Cadigan Offices

**Property Type:** Office

**Gross Floor Area (ft²):** 56,612

**Built:** 2007

**For Year Ending:** 12/31/2016<sup>2</sup>

**Date Application Becomes Ineligible:** 04/30/2017

1. The ENERGY STAR Score is based on total source energy. A score of 75 is the minimum to be eligible for the ENERGY STAR.  
2. Applications must be submitted to EPA within 120 days of the Year Ending Date. The award is not final until approval is received from EPA.



Please use the [Licensed Professional's Guide to the ENERGY STAR® for Commercial Buildings](http://www.energystar.gov/lpguide) for reference in completing this checklist (<http://www.energystar.gov/lpguide>).

## Property & Contact Information

### Property Address

BC Cadigan Offices  
2121 Commonwealth Avenue  
Brighton, Massachusetts 02135

**Property ID:** 3593519

### Property Owner

Boston College  
201 Foster Street  
Brighton, MA 02135  
617-552-6716

### Primary Contact

Terence Leahy  
St Clements Hall  
140 Commonwealth Ave  
Chestnut Hill, MA 02467  
617-552-0317  
[terence.leahy@bc.edu](mailto:terence.leahy@bc.edu)

## 1. Review of Whole Property Characteristics

### Basic Property Information

#### 1) Property Name for Registry: BC Cadigan Offices

Is this the official name to be displayed in the [Registry of ENERGY STAR Certified Buildings and Plants](#)?

☒ Yes ☐ No

If "No", please specify: \_\_\_\_\_

#### 2) Property Type: Office

Is this an accurate description of the primary use of this property?

☒ Yes ☐ No

**3) Location:**

2121 Commonwealth Avenue  
Brighton, Massachusetts 02135

☒ Yes ☐ No

Is this correct and complete?

**4) Gross Floor Area:** 56,612 ft<sup>2</sup>

Does this represent the entire property? (i.e., no part of the building/property was excluded/subtracted from the total) If "no" please specify what space has been excluded.

☒ Yes ☐ No
**5) Average Occupancy:** (b) (4)

Is this occupancy accurate for the entire 12 month period being assessed?

☒ Yes ☐ No
**6) Number of Buildings:** 1

Does this number accurately represent all structures?

☒ Yes ☐ No

**Notes:**

## Indoor Environmental Standards

**1) Ventilation for Acceptable Indoor Air Quality**

Does this property meet the minimum ventilation rates according to ANSI/ASHRAE Standard 62.1, Ventilation for Acceptable Indoor Air Quality?

☒ Yes ☐ No
**2) Acceptable Thermal Environmental Conditions**

Does this property meet acceptable thermal environmental conditions according to ANSI/ASHRAE Standard 55, Thermal Environmental Conditions for Human Occupancy?

☒ Yes ☐ No
**3) Adequate Illumination**

Does this property meet the minimum illumination levels as recommended by the Illuminating Engineering Society of North America (IESNA) Lighting Handbook?

☒ Yes ☐ No

**Notes:**

## 2. Review of Property Use Details

### Office: Office

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

#### ★ 1) Gross Floor Area: 56,612

Is this the total size, as measured between the outside surface of the exterior walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

☒ Yes ☐ No

#### ★ 2) Weekly Operating Hours: (b) (4)

Is this the total number of hours per week that the property is occupied by the majority of the employees? It does not include hours when the HVAC system is starting up or shutting down, or when property is occupied only by maintenance, security, cleaning staff, or other support personnel. For properties with a schedule that varies during the year, use the schedule most often followed.

☒ Yes ☐ No

#### ★ 3) Number of Workers on Main Shift: (b) (4)

Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.

☒ Yes ☐ No

#### ★ 4) Number of Computers: (b) (4)

Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.

☒ Yes ☐ No

#### ★ 5) Percent That Can Be Heated: (b) (4)

Is this the total percentage of the property that can be heated by mechanical equipment?

☒ Yes ☐ No

#### ★ 6) Percent That Can Be Cooled: (b) (4)

Is this the total percentage of the property that can be cooled by mechanical equipment? This includes all types of cooling from central air to individual window units.

☒ Yes ☐ No

**Notes:****3. Review of Energy Consumption****Data Overview****Site Energy Use Summary**

|                        |             |
|------------------------|-------------|
| Electric - Grid (kBtu) | (b) (4)     |
| Natural Gas (kBtu)     |             |
| Total Energy (kBtu)    | 3,286,410.1 |

**Energy Intensity**

|                                |       |
|--------------------------------|-------|
| Site (kBtu/ft <sup>2</sup> )   | 58.1  |
| Source (kBtu/ft <sup>2</sup> ) | 127.8 |

**National Median Comparison**

|  |       |
|--|-------|
| National Median Site EUI (kBtu/ft <sup>2</sup> )   | 101.8 |
| National Median Source EUI (kBtu/ft <sup>2</sup> ) | 224   |
| % Diff from National Median Source EUI             | -43%  |

**Emissions** (based on site energy use)

|  |       |
|--|-------|
| Greenhouse Gas Emissions (Metric Tons CO <sub>2</sub> e) | 233.1 |
|--|-------|

**Power Generation Plant or Distribution Utility:**

NSTAR Co [Eversource Energy]

Note: All values are annualized to a 12-month period. Source Energy includes energy used in generation and transmission to enable an equitable assessment.

**Summary of All Associated Meters**

The following meters are associated with the property, meaning that they are added together to get the total energy use for the property. Please see additional tables in this checklist for the exact meter consumption values.

| Meter Name | Fuel Type   | Start Date | End Date | Associated With   |
|------------|-------------|------------|----------|---|
| (b) (4)    | Electric    | 04/08/2012 | In Use   | Boston Campus<br>Boston College TEST;<br>BC Cadigan Offices |
| (b) (4)    | Natural Gas | 03/21/2012 | In Use   | Boston Campus<br>Boston College TEST;<br>BC Cadigan Offices |

**Total Energy Use**☒ Yes ☐ No

Do the meters shown above account for the total energy use of this property during the reporting period of this application?

**Additional Fuels**☒ Yes ☐ No

Do the meters above include all fuel types at the property? That is, no additional fuels such as district steam, generator fuel oil have been excluded.

**On-Site Solar and Wind Energy**☒ Yes ☐ No

Are all on-site solar and wind installations reported in this list (if present)? All on-site systems must be reported.

**Notes:**

**Electric Meter:** (b) (4) (kWh (thousand Watt-hours))

**Associated With:** Boston Campus Boston College TEST; BC Cadigan Offices

| Start Date  | End Date   | Usage   | Green Power? |
|---|------------|---------|--------------|
| 01/01/2016  | 02/01/2016 | (b) (4) | No           |
| 02/01/2016  | 03/01/2016 |         | No           |
| 03/01/2016  | 04/01/2016 |         | No           |
| 04/01/2016  | 05/01/2016 |         | No           |
| 05/01/2016  | 06/01/2016 |         | No           |
| 06/01/2016  | 07/01/2016 |         | No           |
| 07/01/2016  | 08/01/2016 |         | No           |
| 08/01/2016  | 09/01/2016 |         | No           |
| 09/01/2016  | 10/01/2016 |         | No           |
| 10/01/2016  | 11/01/2016 |         | No           |
| 11/01/2016  | 12/01/2016 |         | No           |
| 12/01/2016  | 01/01/2017 |         | No           |
| <b>Total Consumption (kWh (thousand Watt-hours)):</b> |            | (b) (4) |              |
| <b>Total Consumption (kBtu (thousand Btu)):</b>       |            | (b) (4) |              |

**Total Energy Consumption for this Meter**☒ Yes ☐ No

Do the fuel consumption totals shown above include consumption of all energy tracked through this meter that affect energy calculations for the reporting period of this application (i.e., do the entries match the utility bills received by the property)?

Notes:

Natural Gas Meter: (b) (4) (therms)

Associated With: Boston Campus Boston College TEST; BC Cadigan Offices

| Start Date                               | End Date   | Usage   |
|--|------------|---------|
| 01/01/2016                               | 02/01/2016 | (b) (4) |
| 02/01/2016                               | 03/01/2016 |         |
| 03/01/2016                               | 04/01/2016 |         |
| 04/01/2016                               | 05/01/2016 |         |
| 05/01/2016                               | 06/01/2016 |         |
| 06/01/2016                               | 07/01/2016 |         |
| 07/01/2016                               | 08/01/2016 |         |
| 08/01/2016                               | 09/01/2016 |         |
| 09/01/2016                               | 10/01/2016 |         |
| 10/01/2016                               | 11/01/2016 |         |
| 11/01/2016                               | 12/01/2016 |         |
| 12/01/2016                               | 01/01/2017 |         |
| Total Consumption (therms):              |            |         |
| Total Consumption (kBtu (thousand Btu)): |            |         |

Total Energy Consumption for this Meter

☒ Yes ☐ No

Do the fuel consumption totals shown above include consumption of all energy tracked through this meter that affect energy calculations for the reporting period of this application (i.e., do the entries match the utility bills received by the property)?

Notes:

#### 4. Signature & Stamp of Verifying Licensed Professional

Stephen Di Giacomo (Name) visited this site on Feb 3, 2017 (Date). Based on the conditions observed at the time of the visit to this property, I verify that the information contained within this application is accurate and in accordance with the Licensed Professional Guide.

Signature: Stephen M. DiGiacomo Date: 2/20/17

**Licensed Professional**  
License: 37749 in MA

STEPHEN DIGIACOMO  
160 Beech Street  
Franklin, MA 02038  
508-533-1128  
Steve@EMA-Boston.com



**Professional Engineer Stamp**

**NOTE:** When applying for the ENERGY STAR, the signature of the Verifying Professional must match the stamp.

#### 5. Signatory Agreement

I hereby nominate the above described property for award of the ENERGY STAR. I have provided a copy of the Licensed Professionals Guide to the ENERGY STAR for Commercial Buildings to our Licensed Professional (LP) for reference. As documented by the above checklist, this property meets the conditions necessary to qualify as ENERGY STAR. I am submitting this application within four months of the Year Ending Date (December 31, 2016) used to generate the application. I will assist EPA, if requested, in verifying any data included in this application. Furthermore, I agree to associate the ENERGY STAR logo only with this property and to adhere to the ENERGY STAR Identity Guidelines.

Signature (must be a direct employee of the building owner/manager): Terence Leahy

Date: 2/20/17

Signatory Name: Terence Leahy

Property Owner: Boston College

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2022T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460